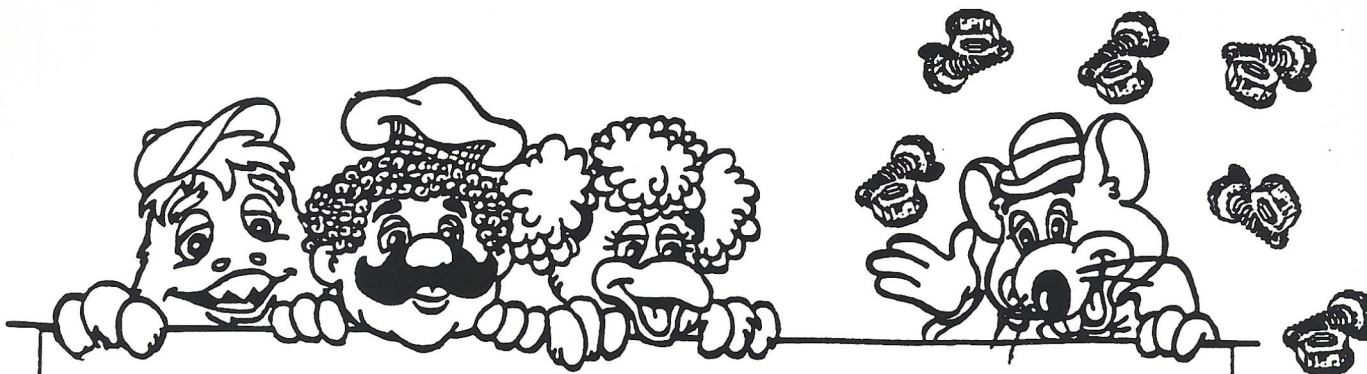




CHUCK
E.
CHEESE'S
TECHNICAL
TIPS
HIGHLIGHTS

CHUCK E. TECHNICAL UNIVERSITY UPDATE



Class of 10/05/92

Keith Bownes/Philadelphia, PA area
Dale Foy/Philadelphia, PA area
Steve Latta/Denver-Arvada, CO
Steven Douglas Price/Dearborn, MI
Richard Quinn/Grand Rapids-Walker, MI

Class of 11/15/92

Allen Davis/Corpus Christi, TX
John Feltz/Antioch, TN
Glenn Nathan Fipps/Fayetteville, AR
Frank Landes/New York area
Fernando Martinez/Colorado Springs, CO
Shane Miguez/Louisiana
Bob Odom/Bossier City, LA
Rod Schierding/St. Louis-N. County, MO
Rickie Sherman/Graden Grove, CA

Good luck to all as they begin their mission of

EVERY GUEST LEAVES HAPPY

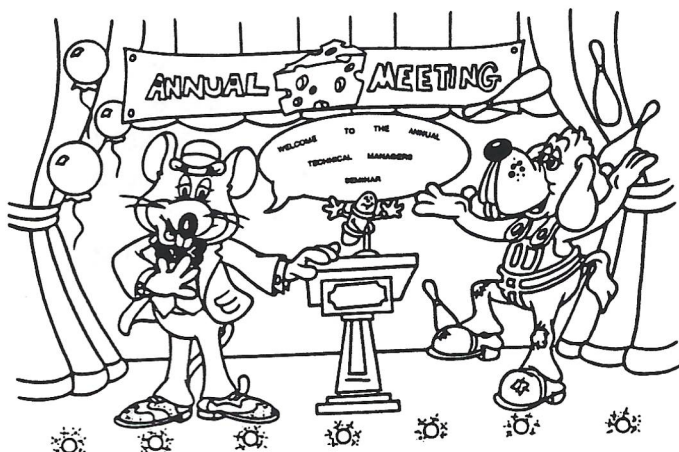
CONGRATULATIONS

MOSS DISTRIBUTING

As you know, Moss is our approved vendor for game parts and repairs. Recently they have issued us the following toll free number. This number is good for Parts and Service.

Moss Distributing
800-659-6587

FIRST ANNUAL DISTRICT TECHNICAL MANAGER SEMINAR



The First Annual District Technical Manager Seminar took place in Dallas on October 23rd through October 25th. During this three day seminar, District Technical Managers got a chance to hear Dick Frank talk about the Entertainment Direction, Terry Spaight go over Operations Overview, and Gene Cramm talk about Games Management, the latest and the greatest. Matt Drennan and Greg Barton discussed Concept Overview and the Big Picture. Jim Newberry, Drake Lee, and Ken Price shared their views on leadership, training, and support.

The District Technical Managers were also given the tour of the Programming Studio, Cosmetic R & D area, Parts, Technical Support, and Chuck E. University.

The three day seminar was full of action and thanks to its coordinators, Jim Newberry, Drake Lee, Ken Price, and Laura Lyon, it ran very smoothly.

Make sure that you ask your District Technical Manager about it.

FLOW CONTROLS

We have been receiving some calls regarding the use of flow controls in Chuck E. half size characters.

The use of flow controls are only recommended in the new half size characters. These characters use the 4-way AC valves instead of 3-way CLIPPARD valves to control the movements. MAC valves operate more efficiently than the CLIPPARD, therefore, the use of flow controls are needed.

Since the Chuck E. 1/2 size show operates at 28 psi and 7 psi; if flow controls are used with CLIPPARD valves, the air flow to the movements will be too restricted and they will not operate correctly.

MODIFICATIONS

To maintain consistency, attached please find two copies of the modification approval form. This form must be completed and submitted for approval before the modification is implemented.

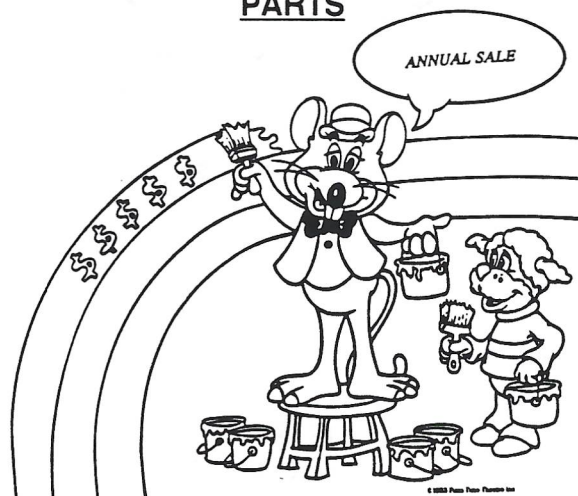
SYMETRIX

Attached to this issue of tips, please find an updated copy of the symetrix settings. Make sure that the settings on your symetrix is updated according to this attachment.

ADVANCE REPLACEMENT

When you request an advance replacement part from a vendor, please keep in mind that these advance replacements are to be used by all ShowBiz and Chuck E. Cheese locations. Therefore, to allow everyone else to get a fair chance at the advance replacement program, make sure that your defective part is sent back to the vendor on the same day as it is replaced.

PARTS



Parts Department has a sale on timers for the Gino rides. These timers are normally priced at \$47.00 and now on sale for only \$40.00 while supplies lasts. The part number for this timer is KRT1.

Also, we stock the following items.

2N3055 transistors at \$1.27 each, Part #M00981. These transistors are used in the show power supplies.

Safety stickers for safety arms on lift rides for only \$2.00 each. The part number for this item is SS-0007.

Plastic license covers for covering the games licenses at \$1.33 each, with part number PLC-001.

Rubber floor matting for games and kiddie rides comes in 36 inch width and your desired length. One linear foot of the rubber matting is priced at \$5.38 and its part number is FM-0001.

BACK-UP BATTERIES

This article was sent to me by Kirt Moore of Huntsville, AL. He called it aerobics for the back-up batteries. Back-up batteries need to be exercised on regular bases to prolong their lives. When it's time to make copies of your back-up program for the register system, after you have made your back ups and verified them, turn off the power to the CPU (this works real well with Fas Fax). Also, your other equipment with battery back up system should be exercised when you P.M. them, i.e. alarm system, and exit lights. All you need to do is turn the power off for about thirty minutes.

Great idea, thanks Kirt.

SHOW COMPRESSOR

With winter approaching and temperatures dropping, make sure that you change the oil in the compressor to 30W non-detergent for easy starts.

If the temperature in your area drops below freezing and you have an outside compressor room, it would be a good idea to invest in a portable heater. Take the heater to the compressor room a few hours before start up to allow the room temperature to come up. After the compressor has been started, the heat generated from the compressor should keep the room warmer. This prolongs the life of the compressor motor.

WATER GAMES



Problem:

Low water pressure.

Solution:

Water games from Bob's Space Racers have a water regulator that is located after the water filter. There are two hex bolts on the top of this regulator, the smaller one holds a wire screen filter. This filter needs to be cleaned every time the main water filter is checked. Simply clean the wire screen filter with warm water.

Thanks to Tim Snelling of the Montfort, TX location for sharing this preventative maintenance issue with us.

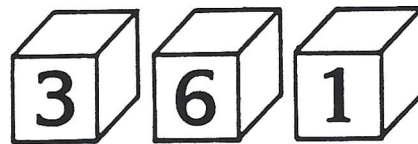
HOW LOGICAL ARE YOU?

Answer to the last issue's question.

Jeff is the dentist.

A SIMPLE ARRANGEMENT (32)

Arrange the blocks shown below to form a three digit number that can be divided by seven with zero remainder.



ONE OF THE LAWS OF THE ELECTRONIC JUNGLE

always remove the last screw
first.

DELTRONIC LABS PARTS PRICE LIST

TICKET DISPENSER PARTS

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
75 DECALS-9	TICKET DECALS	0.59
SA-VAL-KIT	VALIDATION ROLLER KIT	10.35
322HBT2151	TICKET OUT UNIMAX SWITCH	13.23
49FW250-32	WASHER 032	0.05
49FW250-93	WASHER 093	0.05
49F-A-2006	O" RING	0.18
49F-A-2009	TICKET SUPPORT PLATE (METAL)	2.21
49F-A-2010	P.C.B. SPACER	0.23
49F-A-2012	LOCATING SPRING	0.50
49F-A-2013	TENSION SPRING	0.50
49F-A-2015	BRAKE SPRAG	3.60
49F-A-2020	IDLER ROLLER W/BUSHING	4.95
49F-A-2021	DRIVE ROLLER W/"O" RING	5.40
49F-A-2023	STANDARD T/D FRONT PANEL	5.40
49F-A-4766	MOTOR W/CONN. & STAND-OFF	23.40
49F-B-2009	TICKET SUPPORT PLATE (PLASTIC)	1.13
58TICBIN15	TICKET BIN	8.96
49F-N-2023	NARROW T/D FRONT PANEL	4.50
49F-S-2023	S/S FACE PLATE	6.30
75HANDLE15	TRAY HANDLE & HARDWARE	4.50
20IC074C14	I. C. 74C14	1.35
20ICH11AA2	I. C. CHIP H11AA2	1.70
24TRND401K	D40K1 TRANSISTOR	1.01
56SE-H21A1	H21A1 OPTO SENSOR W/RES	2.62
PC-1275-REG	TICKET DISPENSER P.C.B.	20.00
TD-1275-REG	TICKET DISPENSER	74.38

SKEEBALL PARTS

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
20HED16PIN	PROGRAM HEADER 16 PIN	3.60
20IC007405	I. C. 7405	1.01
20IC007408	I. C. 7408	0.68
20IC007410	I. C. 7410	0.73
20IC007442	I. C. 7442	0.95
20IC007476	I. C. 7476	1.11
20IC007485	I. C. 7485	1.51
20IC007490	I. C. 7490	1.04
20IC0TIMER	TIMER CHIP (HEADER)	5.85
21DI01N270	DIODE 1N270	0.88
CU-CONTUNIT	CONTROL UNIT COMPLETE MOD (E)	207.00
PC-LOGIC-E	LOGIC PC BRD SRL-E MOD-E	99.00
PC-MOD-E-PS	P/S PC BRD SRP-E MODEL-E	76.50
21DI0MR500	DIODE MR500	0.68
23RE-VH148	BDG/RECTIFIER #8643 (VH148)	2.03
333-3AMPSB	FUSE 3AMP S.B.	0.63
34R3021051	REED RELAY	6.75
62TRIAC228	TRIAC MAC228	2.37
64P357CLIP	FUSE HOLDER (CHASSIS)	1.58
68V150LA10	VARISTOR V150LA10A	1.08
69TF-786P1	TRANSFORMER 786P1 OR P8641	19.80
20IC007448	I. C. 7448	1.89
32SACTWIRE	SWITCH ACTUATOR WIRE	0.32
32SWE5160B	MICRO BALL COUNT SWITCH	4.73
32SWE5160B	MICRO SCORE TRACK SWITCH	4.73
378002-SUB	2" MASK W/FILTER & DIFF.	5.97
378005-SUB	5" MASK W/FILTER & DIFF.	16.04
37F2IN-FIL	2" FILTER (RED)	0.90
37F5IN-FIL	5" FILTER (RED)	4.50
37M2IN-MYR	2" DIFFUSER (MYLAR)	0.45
37M5IN-MYR	5" DIFFUSER (MYLAR)	0.90
54S-SOL-LG	SPRING SOL. LARGE	1.35
54S-SOL-SM	SPRING SOL. SMALL	1.13
55SPC00025	SPACER 1/4"	0.18
55SPC00058	BANANA PLUG W/SPACER 5/8"	1.58
55SPC00125	BANANA PLUG W/SPACER 1 1/4"	1.74
70SOL4X241	SOLENOID 4X241	12.60
75FAN-MD-E	FAN WITH CABLE	26.55
PC-2IN-RDOT	2" P.C.B. (BALL COUNT)	22.50
PC-5IN-RDOT	5" DISPLAY P.C.B.	54.90

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
RD-2IN-RDOT	2" BALL COUNT DISPLAY COMPLETE	31.50
RO-5IN-RDOT	5" DISPLAY COMPLETE	81.00
SACT014000	COIN & TICKET SELECT UNIT	63.00
SAFT014000	FLASHER-TIMER UNIT	50.40
SAFT014010	FLASHER ONLY (OUT)	16.20
SAL1008000	BEACON FLASHER W/MT. BKT.	40.50
SAWS009000	WINNER SELECT UNIT	54.00
36LAMP-#73	#73 LAMP FOR BALL COUNT	0.35
36LAMP-#74	#74 LAMP FOR BALL COUNT	0.35
36LMP#1813	#1813 FOR DELTRONIC DISP.	1.00
36LP10C7D6	#10C7DC FOR CHEMCORP. DISP.	2.00
36LP25T8DC	25T8DC GAME OVER FLASHER	2.25
53SC25T8DC	SOCKET FOR GAME OVER 25T8DC	3.11
53SC-73-74	SOCKET FOR #73 & #74 LAMPS	0.45
	TOP MOUNT CHANNEL COVER	67.50
MW-E/HT/MNT	EMPTY E-H TRAY TOP/MNT	72.00
SA-SOUNDKIT	SOUND KIT FOR MODEL (E) SKEEBALL	166.50
30BEAU-FEM	FEMALE BEAU CONNECTOR	5.85
30BEAU-MAL	MALE BEAU CONNECTOR	6.53
69T4F1G010	TRANSFORMER 41FG010	11.96
75J-17CABL	J-17 CABLES	12.15
MW-SKE-TRAY	EMPTY TRAY BMT/MNT MODEL (E)	87.30
SATA016000	ADAPTER UNIT TMA	85.50
TD-1005---E	TICKET DISPENSER	74.38
TD-SKEE-BAL	DISPENSER BMT/MNT W/TRAY MOD -E	244.71
TD-TOPMNT-E	DISP. TOP MT/MODEL-E W/O COVER	244.71

HOOP SHOT, PRO-PITCH, BATTER-UP, BULL-PEN

<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
SC-700	CONTROL UNIT	186.30
PSD-HS	POWER SUPPLY	141.30
HS-B	BREAK PCB	45.00
	RELAY ONLY	5.85
D2-2-3	CLOCK DISPLAY	76.80
D2-2-5	SCORE DISPLAY	76.80
	LAMP SOCKETS	1.12
	LAMP	1.57
	HARNESS/CABLE	62.10
TRD-8	LAMP DRIVER PCB	54.00
BULL-PEN		
PS-12VRS	POWER UNIT	104.40
PSD-BP-1	POWER UNIT	140.13
SC-700	CONTROL UNIT	186.30
D2-2-3	MPH DISPLAY	97.20
TRD-8-3	BALL & STRIKE LAMP DRIVER	70.20
D-5-1	MPH DISPLAY COMPLETE	148.50
D-5-1 PCB	MPH PCB ONLY	67.50
PRO-PITCH		
PSD-PP	POWER UNIT	
D2-2-5	SCORE DISPLAY	69.12
MISCELLANEOUS		
2200 MF CAP		1.08
5338 ZENOR DIODE		1.08
3N353 RECTIFIER		1.17
MAC 3010 TRIAC DRIVER		1.12
MAC 223 TRIAC		3.15
74C164		1.80
ULN 2003A		1.35
MR-500 DIODE		.72
LM-380		1.35
5821 IC		3.15
20-C15SO IC		4.50
20C1330		4.50
ALL PROMS/ALL REV.		18.00

MODIFICATION APPROVAL FORM

To maintain consistency, all modifications must be approved by the Games Management Department.

Date: _____
Name: _____
Location: _____
Equipment: _____

Mail to: ShowBiz
Technical Support Department
P. O. Box 152077
Irving, TX 75015

Problem: _____

Recommended Fix: _____

Parts/Materials/Supplier/Cost: _____

Technical Support Use Only

Reviewed By: _____
Recommendation: _____
Date of Reply: _____

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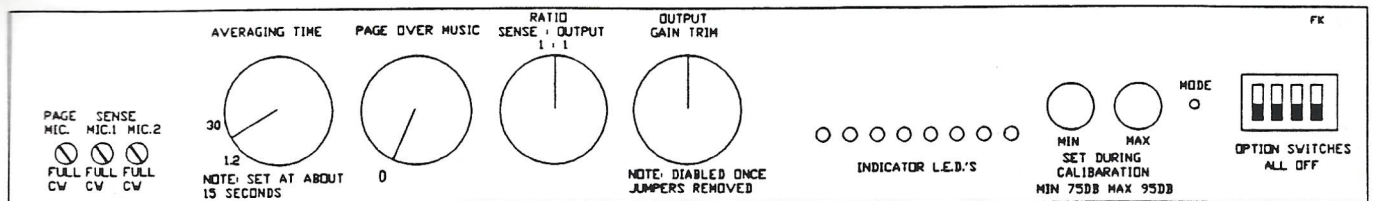
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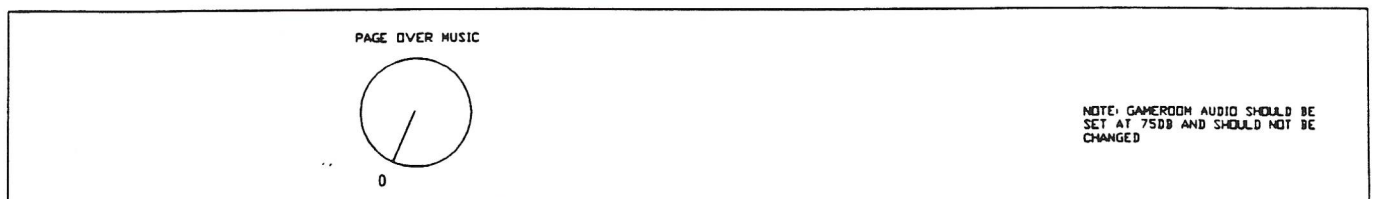
Reviewed By: _____
Recommendation: _____

Date of Reply: _____

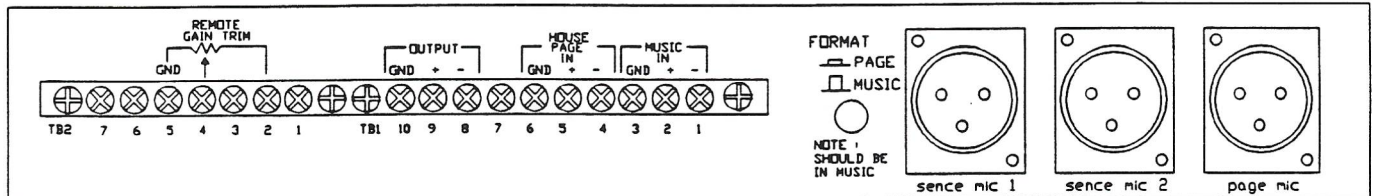
MASTER SYMETRIX 571 SPL SETTINGS



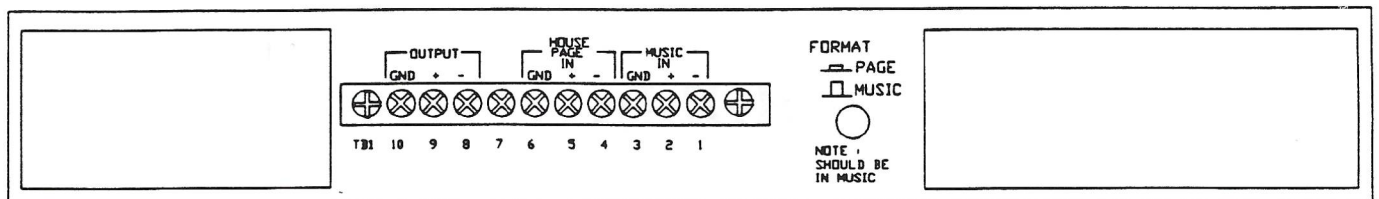
SLAVE SYMETRIX 571 S SETTINGS



REAR VIEW OF MASTER SYMETRIX



REAR VIEW OF SLAVE SYMETRIX



9/28/92

